(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
15 September 2005 (15.09.2005)

PCT

(10) International Publication Number
WO 2005/085526 A3

(51) International Patent Classification[7]: D21H 27/02, 27/30, B31F 1/07

(21) International Application Number:
PCT/IT2005/000114

(22) International Filing Date: 1 March 2005 (01.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
FI2004A000053 4 March 2004 (04.03.2004) IT

(71) Applicant *(for all designated States except US)*: **FABIO PERINI S.P.A.** [IT/IT]; Via per Mugnano, I-55100 Lucca (IT).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **NENCIONI, Giovanni** [IT/IT]; Via del Giardino 66/F, I-56019 Vecchiano (IT). **MADDALENI, Romano** [IT/IT]; Via Valdinievole Sud 102, I-56031 Bientina (IT). **GELLI, Mauro** [IT/IT]; Via del Marginone 24, Fraz. Pieve S. Paolo, I-55066 Capannori (IT).

(74) Agents: **MANNUCCI, Michele** et al.; Uff. Tecn. Ing. A. Mannucci S.r.l., Via della Scala, 4, I-50123 Firenze (IT).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

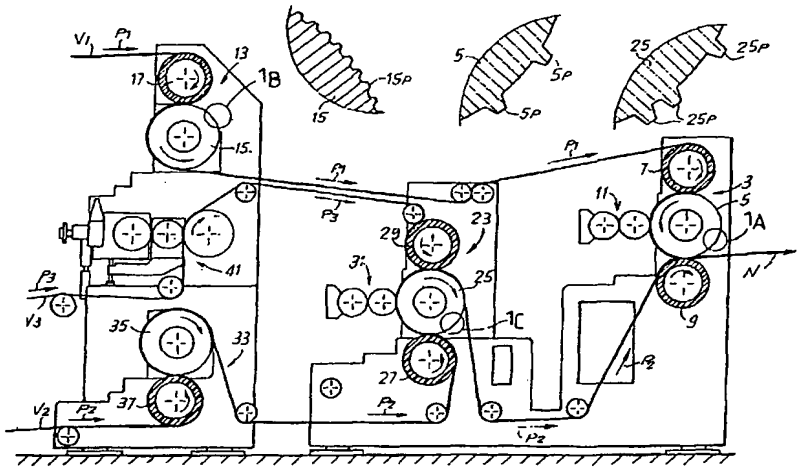
(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*
— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(88) Date of publication of the international search report:
17 November 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: MULTI-PLY PAPER PRODUCT OR THE LIKE, METHOD FOR THE PRODUCTION THEREOF AND RELATIVE SYSTEM



(57) Abstract: A device is provided to produce an embossed multi-ply material, comprising: a first embossing-laminating unit (3) comprising a first embossing cylinder (5) equipped with first projections (5P) defining a first pattern, a first pressure roller (7) cooperating with said first embossing cylinder (5), a first laminating roller (9) and a first glue dispenser (11), disposed between said first pressure roller (7) and said first laminating roller (9); an embossing unit comprising at least a second embossing cylinder (25) provided with second projections (25P) defining a second pattern and a second pressure roller (27) cooperating with said second embossing cylinder (25); a first path (P1) for at least a first ply (V1) towards and through said first embossing-laminating unit (3); a second path (P2) for at least a second ply (V2) towards and through said second embossing unit (23); a third path (P3) for said third ply (V3).

WO 2005/085526 A3